



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/415,471 10/08/99 GARDINER

M 28724/35321 *zh*

EXAMINER

MMC2/0815

ANTHONY G SITKO MARSHALL O'TOOLE  
GERSTEIN MURRAY & BORUN  
6300 SEARS TOWER  
233 SOUTH WACKER DRIVE  
CHICAGO IL 60606-6402

NGIVEN S  
ART UNIT PAPER NUMBER

2877  
DATE MAILED:

08/15/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

**Office Action Summary**

Application No.

09/415,471

Applicant(s)

GARDINER ET AL.

Examiner

Sang Nguyen

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10/08/99, IDS filed on 6/20/00, 01-02/01.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |                                                                                                                |                                                                             |
|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                    | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5-7</u> . | 6) <input type="checkbox"/> Other:                                          |

Art Unit: 2877

## **DETAILED ACTION**

### ***Drawings***

1. The drawings filed on 10/08/99 are objected by the draftsman as indicated on attached PTO-948. Correction is required.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "a first value" in claims 1, 12, 24, and 27; the "a first predetermined location" in claims 1-4, 11-12, 16, 19, 24, and 27; the "a second value" in claims 1, 12, 24, and 27; the "a second predetermined location" in claims 1-2, 4, 11-12, 16, 19, 24, and 27 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Applicant is required to submit a proposed drawing correction in response to this Office action. However, correction of the note defect can be deferred until the applicant is allowed by the examiner.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2877

4. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masaki (U.S. Patent No. 5,940,571).

Regarding claims 1, 4, 7-12, 15, 18-19, 24-25, and 27; Masaki disclosed an optical element comprising:

- \* an optical transmissive film or lens film (5 of figure 2) having a first surface (5a of figure 2) and a second surface (5b of figure 2), and a first edge and a second edge (figures 1-3);

- \* a plurality of optical structures or a plurality of triangular prism (6 of figure 4) formed on the first surface of lens film (5 of figure 4) in a predetermined pattern (figures 2-4), wherein each optical structure (5) has selected at least one characteristic from the group consisting of an amplitude (figures 4-5), a period and an aspect ratio (col. 12 lines 5-67, table 1, and figures 4-5);

- \* a lightguide (1 of figure 1) having an input surface or incidence end surface (1b of figure 1) and an output surface (1c of figure 1); and

- \* the film (3, 5 of figure 2) being coupled to one of the input surface and the output surface of lightguide (1 of figure 1). See figures 1-10.

Masaki discloses the claimed invention except for the characteristic of the optical structure has a first value for a first predetermined location on the transmissive film between the first edge and the second edge; and the characteristic of the optical structure has a second value for a second predetermined location on the transmissive film between the first edge and the second edge, wherein the first value of characteristic of the optical structure for the first predetermined location on the transmissive film has different from the second value of

Art Unit: 2877

characteristic of the optical structure for the second predetermined location on the transmissive film. However, Masaki teaches that the characteristic of the optical structure has a first value or maximum measured value for a first predetermined location on the transmissive film between the first edge and the second edge; and the characteristic of the optical structure has a second value or minimum measured value for a second predetermined location on the transmissive film between the first edge and the second edge, wherein the first value of characteristic of the optical structure for the first predetermined location on the transmissive film has different from the second value of characteristic of the optical structure for the second predetermined location on the transmissive film (See col. 11 line 10 to col.12 line 67 and figures 1-10) Thus it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Masaki's the optical element device for the purpose of transmission liquid crystal display using in lightguide and lens film.

Regarding claims 2-3 and 16-17; figures 1A-1B of Masaki discloses the characteristic of optical structure is decreased in intensity at the second predetermined location from the first predetermined location is adjacent the first edge.

Regarding claims 5-6 and 20-21; Masaki teaches that a discrete optical formation of each optical structure within the first surface is selected at least one from group of a prism , a line, square, a dot and an ellipse. See figures 4-5.

Regarding claims 13-14 and 26; Masaki discloses the lightguide operated comprises one of wedge, a pseudo wedge, a slab and a hollow body (col. 6 lines 1-45).

Art Unit: 2877

Regarding claims 22-23; Masaki teaches that the optical transmissive film (5 of figure 2) is bonded to the lightguide (1 of figure 2).

*Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Goto et al (5,999,685) discloses lightguide plate and surface light source using the lightguide plate; Shinji et al (6,259,854) teaches that lightguide; or Maito (6,075,649) discloses the lens film and planar light source apparatus.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Sang Nguyen whose telephone number (703)308-6426. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Frank Font, can be reached on (703)308-4881. The fax phone number for the organization where this application or proceeding is assigned is (703)308-7722 or 7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

SN  
Nguyen/ sn

August 4, 2001

  
Frank G. Font  
Supervisory Patent Examiner  
Technology Center 2800